CLAIMS

1. An IC card comprising:

a first functional block and a second functional block each comprising a semiconductor integrated circuit; and

a plurality of connector terminals exposed,

wherein said plurality of connector terminals are disposed in plural rows in a zigzag fashion between columns adjacent to one another back and forth as viewed in an insertion direction of said IC card, and

wherein said connector terminals include a first connector terminal connected and dedicated to the first functional block, a second connector terminal connected and dedicated to the second functional block, and a third connector terminal sharing an operating power supply commonly to both the first functional block and the second functional block.

2. An IC card comprising:

a first functional block and a second functional block each comprising a semiconductor integrated circuit; and

a plurality of connector terminals exposed,

wherein said plurality of connector terminals have an array of two columns formed back and forth as viewed in an IC card insertion direction, and an array of

terminal-to-terminal areas between the connector terminals disposed in a first column, and terminal-to-terminal areas between the connector terminals disposed in a second column are shifted from each other in a column direction, and

wherein said connector terminals include a first connector terminal connected and dedicated to the first functional block, a second connector terminal connected and dedicated to the second functional block, and a third connector terminal sharing an operating power supply commonly to both the first functional block and the second functional block.

3. An IC card comprising:

a first functional block and a second functional block each comprising a semiconductor integrated circuit; and

a plurality of connector terminals exposed,

wherein said plurality of connector terminals have an array of two columns formed back and forth as viewed in an IC card insertion direction, and a column-direction layout of the connector terminals disposed in a first column and a column-direction layout of the connector terminals disposed in a second column are shifted from each other in a column direction, and

wherein said connector terminals include a first connector terminal connected and dedicated to the first

functional block, a second connector terminal connected, and dedicated to the second functional block, and a third connector terminal sharing an operating power supply commonly to both the first functional block and the second functional block.

4. The IC card according to claim 2 or 3, wherein the connector terminal at one end extending in a column direction of the connector terminals disposed in the second column extends to a position where said connector terminal adjoins, in a column direction, the connector terminal disposed in the first column and placed at one end extending in a column direction of the connector terminals thereof, and

wherein the connector terminal at the other end extending in a column direction of the connector terminals disposed in the second column extends to a position where said connector terminal adjoins, in a column direction, the connector terminal disposed in the first column and placed at the other end extending in a column direction of the connector terminals thereof.

5. The IC card according to any of claims 1 to 4, wherein the first functional block is a first memory card unit including an electrically rewritable first non-volatile memory, and a first controller which performs access control on the first non-volatile memory in

accordance with instructions supplied from the first connector terminal and control on an interface with the outside via the first connector terminal, and

wherein the second functional block is a second memory card unit including an electrically rewritable second non-volatile memory, and a second controller which performs access control on the second non-volatile memory in accordance with instructions supplied from the second connector terminal and control on an interface with the outside via the second connector terminal.

6. The IC card according to claim 5, wherein said first controller has a security function for encrypting data written into the first non-volatile memory and decrypting data read from the first non-volatile memory or effecting other encryption on the data, and

wherein the second controller has a security function for encrypting data written into the second non-volatile memory and decrypting data read from the second non-volatile memory or effecting other encryption on the data.

7. The IC card according to claim 5, wherein the first connector terminal includes a clock terminal and a data terminal, the second connector terminal includes a clock terminal and a data terminal, and the third connector terminal includes a source voltage supply

terminal and a ground voltage supply terminal, and

wherein the first memory card unit and the second memory card unit are configured as a parallel operable multibank memory unit.

8. The IC card according to any of claims 1 to 4, wherein the first functional block is a first data processing unit provided with a first non-volatile memory, and a first controller which performs access control on the first non-volatile memory and performs control on an interface with the outside via the first connector terminal,

wherein the second functional block is a second data processing unit provided with a second non-volatile memory, and a second controller which performs access control on the second non-volatile memory and performs control on an interface with the outside via the second connector terminal, and

wherein the first data processing unit and the second data processing unit respectively have areas for storing secrete codes for security, separately.

9. The IC card according to claim 8, wherein the first data processing unit is configured such that a secrete code is written into a secrete code storage area at a non-volatile memory manufacturing stage, and the second data processing unit is configured such that a

secrete code is written into a secrete code storage area at a manufacturing stage of the IC card.

10. The IC card according to claim 8 or 9, wherein the first data processing unit functions as a memory card unit, and the second data processing unit functions as an SIM card unit brought into microcomputerization.

11. The IC card according to claim 10, wherein the first controller has a security function for encrypting data written into the first non-volatile memory and decrypting data read from the first non-volatile memory or effecting other encryption on the data.

12. The IC card according to claim 8 or 9, wherein the first connector terminal includes a clock terminal, data terminals of plural bits and a command terminal of one bit, the second connector terminal includes a clock terminal, a data terminal and a reset terminal, and the third connector terminal includes a source voltage supply terminal and a ground voltage supply terminal.

13. The IC card according to claim 2 or 3, wherein the third connector terminal includes a connector terminal disposed in a first column and used for source voltage supply, and a connector terminal column corresponding to a second column is provided so as to

have a terminal-to-terminal area at a position adjacent to the source voltage supply connector terminal.

14. A mobile communication system comprising:

a card slot adapted to insert a multifunction card.

15. A mobile communication system according to claim 14,

wherein the card slot includes:

first terminals,

second terminals, and

third terminals,

wherein the first and the third terminals are for a first function of the multifunction card, and

wherein the second and the third terminals are for a second function of the multifunction card.

16. A mobile communication system according to claim 15,

wherein the first function of the multifunction card is a memory card function, and

wherein the second function of the multifunction card is a security card function.

17. A multifunction card, which is capable of inserting to arbitrary one of a first mobile communication system or a second mobile communication system, comprising:

first terminals;

second terminals; and

third terminals,

wherein the multifunction card comprises a first function and a second function,

wherein the first function is a memory card function,

wherein the second function is a security card function,

wherein all of the first terminals, the second terminals and the third terminals are coupled to the first mobile communication system, when the multifunction card is inserted to the first mobile communication system, and

wherein all of the first terminals and the third terminals are coupled to the second mobile communication system and the second terminals are not coupled to the second mobile communication system, when the multifunction card is inserted to the second mobile communication system.

18. A multifunction card according to claim 17,

wherein said first terminals and the third terminals are for the memory card function, and

wherein said second terminals are for the security card function.

19. A multifunction card according to claim 18,

wherein said third terminals are for the security card function, furthermore.

20. A multifunction card according to claim 19 comprising a plurality of semiconductor chips,

wherein a first semiconductor chip is for the memory card function, and

wherein a second semiconductor chip is for the security card function.

21. A multifunction card according to claim 20,

wherein a third semiconductor chip is for the memory card function.